#### INSTALLATION AND O P E R A T I O N GUIDE



#### **SPECIFICATIONS**

WOOFER (DUAL VOICE COIL) CM6.1SI: 6-1/2" talc-filled polypropylene with a foam surround CM6.3SI & CM6.5SI: 6-1/2" mica-filled polypropylene, butyl rubber surround CM8.5SI: 8" mica-filled polypropylene with a butyl rubber surround

TWEETER (DUAL) CM6.1SI & CM6.3SI: 3/4" fluid-cooled ultra-wide dispersion Kaladex® CM6.5SI & CM8.5SI: 3/4" fluid-cooled ultra-wide dispersion Teteron

RECOMMENDED AMP POWER CM6.1SI: 3 - 50 watts CM6.3SI: 5 - 100 watts CM6.5SI: 10 - 125 watts CM8.5SI: 10 - 150 watts

FREQUENCY RESPONSE CM6.1SI: 65Hz to 20kHz +/- 4dB CM6.3SI: 60Hz to 20kHz +/- 4dB CM6.5SI: 55Hz to 20kHz +/- 4dB CM8.5SI: 45Hz to 20kHz +/- 4dB

#### SENSITIVITY

CM6.1SI: 90dB for 2.82V pink noise CM6.3SI: 88dB for 2.82V pink noise CM6.5SI: 89dB for 2.82V pink noise CM8.5SI: 90dB for 2.82V pink noise

IMPEDANCE CM6.1SI: 8 ohm CM6.3SI, CM6.5 & CM8.5SI: 6 ohm

**OVERALL DIMENSIONS** (with frame) 9-1/4" in diameter CM8.5SI: 10-5/8" in diameter

MOUNTING DEPTH 3-3/8" (based on 1/2" drywall) CM8.5SI: 3-3/4" (based on 1/2" drywall)

**CUT-OUT FOR RETROFIT** 8" diameter CM8.5SI: 9-1/2" in diameter

WEIGHT CM6.1SI: 3 lbs. 2 oz. CM6.3SI: 4 lbs. 2 oz. CM6.5SI: 4 lbs. 2 oz. CM8.5SI: 8 lbs. 5 oz.



BLENDING HIGH FIDELITY

#### FEATURES & BENEFITS

The CM6.1SI, CM6.3SI, CM6.5SI and CM8.5SI stereo input ceiling mount loudspeakers offer Niles durability, installation ease and are designed for unobtrusive installations.

CM Stereo Input loudspeakers are designed to deliver stereo sound from a single speaker. Dual tweeters housed in a stereo imaging faceplate deliver left and right channels (stereo) while a dual voicecoil woofer mechanically sums both left and right channels, creating a convincing illusion of stereo through a single speaker.

#### PACKAGE CONTENTS

- 1 Piece Speaker With Grille
- 1 Piece Hole Template/Paint Mask

CM Stereo Input speakers are ideal for locations where a stationary "sweet spot" is impossible or impractical such as hallways or entryways. They also deliver quality two-channel sound in locations that only have enough space to accommodate a single speaker such as an enclosed shower.

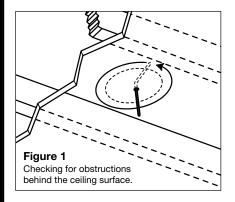
#### **PLACEMENT CONSIDERATIONS**

The CM6.1SI, CM6.3SI, CM6.5SI and CM8.5SI are designed to work well in any standard ceiling. The mounting surface must be at least 3/8" thick. They will perform well in any air volume greater than .5 cubic feet.

### WIRING CONSIDERATIONS

These speaker are designed to be minimally affected by long lengths of speaker wire. They will accommodate speaker wire between 12 and 18 gauge.

### **INSTALLATION PROCEDURE**



1. Cut a foot-long piece of coat hanger. Bend the wire (creating a right angle) leaving 4-3/4" (5-3/8" for the CM8.5SI) at one end (this allows for the extra width of the mounting dogs). Poke the "L-shaped" wire into the pilot hole and turn it in a complete circle and move it into the ceiling cavity to make sure you have approximately 4" of depth. If the coat hanger movement is obstructed by anything, fill the hole(s) with spackle and try another location (See Figure 1).

CONTINUED OTHER SIDE

#### INSTALLATION AND OPERATION GUIDE

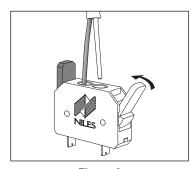


Figure 2 Installing the No-Strip Connector

The CM6.3SI, CM6.5SI and CM8.5SI are equipped with dual No-Strip Terminals. Follow this procedure for both left and right speaker wires.

Separate the speaker wire so that at least two inches of each conductor are free.

Open the no-strip connector by applying pressure to the red and black levers until an audible "click" is heard.

Insert one unstripped wire fully into the black and one into the red terminal. Pay attention to the markings on the wire. Each speaker must be connected to the amplifier in the same way. Squeeze the red and black levers until they click signifying that they have locked into the wire. Check to make sure that the knife assembly inside the no strip connector has properly pierced the wire.

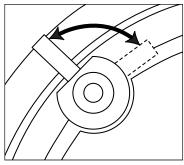


Figure 3 Detail of Mounting System

#### **INSTALLATION PROCEDURE** CONTINUED

2. Locate the hole template and remove the inside portion of it (save this part it can also be used as a paint mask). Use the inside of the template to trace the outlines at the desired location on the ceiling or wall. With a keyhole saw, cut along the penciled lines.

# BE CAREFUL NOT TO CUT THROUGH ANY EXISTING WIRING.

- **3.** Attach the speaker wire (CM6.1SI) or no-strip speaker wire connectors (CM6.3SI, CM6.5SI and CM8.5SI) to the speaker. **(See Figure 2)**.
- **4.** There are four clamps which hold the speaker in place. The clamps are tight-ened via four front-baffle screws. To install the speaker, first rotate the

clamps inward. Insert the speaker into the cutout and tighten the clamps by turning the screws clockwise. DO NOT over tighten these screws. Over-tightening the clamps may make the grille difficult to install (See Figure 3).

NOTE: The screws will be easier to turn if you "prime" them first. Before installing the speaker, turn the screws in and then turn them back out to their original positions.

**5.** Install the grille into the speaker. The grille fits tightly. This is to prevent the grille from becoming loose over time. Some effort and care is required when installing them.

### **REMOVING THE GRILLE**

To remove the grille, obtain a small paper clip (size #1, common) and bend the last quarter inch of it into an "L" shape. Holding the paper clip with a pair of pliers, insert the end with the "L" into

a hole near the edge of the grille. Remove the grille by pulling the paper clip towards you.

#### PAINTING THE SPEAKERS AND GRILLES

The Stereo Input loudspeakers may be painted. The plastic will readily accept most any kind of paint.

The speaker must be masked prior to painting them. The inside portion of the hole template can be used as a paint mask. Remove the outside portion of the template by gently pulling along the perforation. Affix the mask to the front of the speaker using a piece of tape. Fold the tape onto itself to form a doublesided loop. Affix the tape to the tweeter and place the mask onto the speaker.

The grille should be painted before it is installed. The best results will be obtained by using a spray gun or airless sprayer, thinning the paint (prevents clogging of grille holes) and by applying several light coats instead of one heavy one.



www.nilesaudio.com

## NILES AUDIO CORPORATION 12331 S.W. 130 Street Miami, Florida 33186 Tel: (305) 238-4373 Fax: (305) 238-0185

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